

In the Claims

Please cancel claims 1-15 and 17- 21 and add new claims 23 – 45.

1-15 (Cancelled)

16. (Original) A method of synchronizing data in a database network, comprising the steps of:

- (a) providing a database network router for mediating communications between at least one client and at least one database server of the database network;
- (b) receiving an updated data object from one of said at least one client of the database network;
- (c) waiting for said at least one database server to report a successful update; and
- (d) upon receipt of said report allowing access to said updated data object.

17- 21 (Cancelled)

22. (Original) A method of migrating from an old database to a new database, comprising the steps of:

- (a) monitoring at least one communication of at least one client, between at least one database network router and:
 - (i) the old database, thereby providing first load results, and
 - (ii) the new database, thereby providing second load results; and
- (b) comparing said first and said second load results to identify which of said at least one communication, between said at least one database network router and the new database, requires tuning.

23. (New) A system for optimization of database access in a database network comprising:

- (a) at least one client;
- (b) at least one database server; and
- (c) a database network router for managing data flow between said at least one client and said at least one database server;

whereby said database network router may be used to optimize access to said at least one database server by said at least one client.

24. (New) The system of claim 23, wherein said database network router includes:

- (i) a client access module for communicating with said at least one client,
and
- (ii) a database resource manager for communicating with said at least one database server.

25. (New) The system of claim 24, wherein said client access module and said database resource manager share a common software interface for said communicating.

26. (New) The system of claim 25, wherein said software interface comprises a protocol manager for handling multiple database protocols.

27. (New) The system of claim 24, further comprising:

- (iii) local data storage, wherein said database resource manager stores local data.

28. (New) The system of claim 27, wherein said local data is chosen from the group consisting of commonly used data objects, results of parsed query statements, non-optimized query statements, alternatives for said non-optimized query statements, user defined objects and performance statistics.

29. (New) The system of claim 24, wherein a portion of said database resource manager is installed as a database server agent.

30. (New) A method for optimization of database access in a database network comprising the steps of:

- (a) providing a database network router; and

(b) using said database network router for managing data flow between at least one client and at least one database server in the database network.

31. (New) The method of claim 30, wherein the step of using said database network router includes:

- (i) receiving at least one client communication,
- (ii) sending said at least one client communication to said at least one database server, and
- (iii) in response to said at least one client communication, receiving at least one database communication and sending said at least one database communication to said at least one client.

32. (New) The method of claim 31, wherein said at least one client communication is selected from the group consisting of database queries and updates and wherein said at least one database communication is selected from the group consisting of database responses and data.

33. (New) The method of claim 31, wherein the step of using said database network router further includes,

- (iv) prior to said receiving, assigning a priority to each said at least one client communication, and
- (v) performing (i)-(iii) according to said priority.

34. (New) The method of claim 31, wherein the step of using said database network router further includes, prior to said assigning:

- (vi) identifying said at least one client, and
- (vii) receiving status information selected from the group consisting of a load of said at least one database server, a time of day of said assigning, a day of week of said assigning, a service level of said at least one client, and a status of at least one communications line between said at least one client and said at least one database server.

35. (New) The method of claim 31, wherein said at least one client

communication includes a query and wherein the step of using said database network router further includes, prior to said sending, at least one action selected from the group consisting of analyzing said query, modifying said query, checking a cost estimate of said query, parsing said query and storing said query in a local storage.

36. (New) The method of claim 35, wherein said modifying of said query includes blocking of said query, and wherein said at least one database communication includes an error message.

37. (New) The method of claim 30, wherein the step of using said database network router includes:

- (i) receiving a log-out and disconnect request from a first client that is initially connected to one of said at least one database server by a database connection, and
- (ii) reporting said log-out to said one database server while leaving said database connection available for a second client

38. (New) The method of claim 37, wherein the step of using said database network router further includes:

- (iii) receiving a log-in and connection request from said second client;
- (iv) reporting said log-in to said database server; and
- (v) using said database connection for said second client.

39. (New) The method of claim 38, wherein the step of using said database network router further includes: prior to said reporting:

- (vi) responding to said first client log-out and disconnect request with a message confirming log-out and disconnect.

40. (New) The method of claim 38, wherein the step of using said database network router includes:

- (i) sending at least one query to one of the database servers; and
- (ii) monitoring a processing of said at least one query by said one database server, said monitoring including receiving information, regarding said at least

one query, selected from the group consisting of a CPU time of said database server, a response time of said database server, a read/write load of said database server and an execution load of said database server.

41. (New) The method of claim 40, wherein the step of using said database network router further includes: (iii) subsequent to said receiving, storing said queries in a log of popular non-optimized queries.

42. (New) The method of claim 41, wherein the step of using said database network router further includes: (iv) reading said queries from said log.

43. (New) The method of claim 42, wherein the step of using said database network router further includes: (v) analyzing and testing said queries.

44. (New) The method of claim 43, wherein the step of using said database network router further includes: (vi) building optimized alternatives for said queries.

45. (New) A method of load balancing in a database network that includes a plurality of database servers, comprising the steps of:

- (a) providing a database network router;
- (b) detecting a failed one of the database servers; and
- (c) using said database network router for transferring connections of said failed database server to at least one other server.

46. (New) The method of claim 45, wherein the step of using said database network router includes:

- (i) monitoring said failed database server for a recovery thereof, and
- (ii) transferring at least one new connection to said failed database after said recovery.